

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F.	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,582	07/14/2004		Troy Clutton	010100-120	9318
21836	7590	05/05/2006		EXAMINER	
HENRICK	S SLAVI	N AND HOLMES	VASUDEVA, AJAY		
SUITE 200 840 APOLLO STREET				ART UNIT	PAPER NUMBER
EL SEGUNDO, CA 90245				3617	

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/501,582	CLUTTON ET AL	CLUTTON ET AL.	
Office Action Summary	Examiner	Art Unit		
	Ajay Vasudeva	3617		
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet w	ith the correspondence ac	ldress	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period or - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNI 36(a). In no event, however, may a will apply and will expire SIX (6) MOI , cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this c BANDONED (35 U.S.C. § 133).		
Status				
1)⊠ Responsive to communication(s) filed on 13 F	ebruary 2006.			
2a)⊠ This action is FINAL . 2b)☐ This	action is non-final.			
3) Since this application is in condition for allowar	nce except for formal mat	ters, prosecution as to the	e merits is	
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.[). 11, 453 O.G. 213.		
Disposition of Claims				
4)⊠ Claim(s) <u>1-30 and 32-46</u> is/are pending in the	application.			
4a) Of the above claim(s) is/are withdraw	wn from consideration.			
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>1-30,32-46</u> is/are rejected.				
7) Claim(s) is/are objected to.				
8) Claim(s) are subject to restriction and/o	r election requirement.			
Application Papers				
9)☐ The specification is objected to by the Examine	er.			
10)☐ The drawing(s) filed on is/are: a)☐ acc	epted or b)⊡ objected to	by the Examiner.		
Applicant may not request that any objection to the				
Replacement drawing sheet(s) including the correct	,	• •	* *	
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attache	d Office Action or form P	10-152.	
Priority under 35 U.S.C. § 119				
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of:	priority under 35 U.S.C.	§ 119(a)-(d) or (f).		
1. Certified copies of the priority document	s have been received.			
2. Certified copies of the priority document	s have been received in A	Application No		
 Copies of the certified copies of the prio 	rity documents have beer	received in this National	Stage	
application from the International Bureau	, , , , , , , , , , , , , , , , , , , ,			
* See the attached detailed Office action for a list	of the certified copies not	received.		
Attachment(s)				
1) Notice of References Cited (PTO-892)		Summary (PTO-413)		
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 		(s)/Mail Date Informal Patent Application (PT0	O-152)	
Paper No(s)/Mail Date	6) Other:		-	

Application/Control Number: 10/501,582 Page 2

Art Unit: 3617

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-30 and 32-46 are rejected under 35 U.S.C. 102(b) as being anticipated by AU 9170912 A (WEBERLING).

Re independent claims 1, 12, 14, 35, 38 and 42, Weberling shows a fin assembly, having a larger fin [12] and a smaller fin [16] extending from a base [15], the fins having respective primary and secondary leading edges, as well as primary and secondary trailing edges. The base and the fins are integrally formed, wherein the base extends longitudinally between the leading primary edge and the trailing secondary edge. The leading and trailing edges of the fins are aligned. The trailing primary edge and the leading secondary edge are joined by an intermediate arcuate edge defined by the base. The fins include respective pairs of opposite faces that extend between the leading and trailing edges.

Re the newly added limitation "the smaller fin trailing the larger fin" in the newly amended claims 1, 12, 14, 35, 38 and 42, consider the following two scenarios.

Art Unit: 3617

Scenario 1: It is first noted that the relative positioning of the smaller fin with respect to the larger fin depends entirely on the orientation of the fin assembly. In the present case, the fin assembly of Weberling is <u>capable of</u> being installed <u>reversibly</u> on a surfboard or any flotation device. If installed in such manner, the smaller fin would trail the larger fin. In such orientation, however, it is acknowledged that the trailing smaller fin would curve toward the larger fin, rather than away from it.

Scenario 2: Alternatively, applicant may <u>additionally</u> note that board devices used in watersports are often subjected to propulsion forces in both forward as well as rearward directions. For example, when negotiating a steep wave, a forward moving surfboard may first stall and then begin to move backward. The <u>conventionally installed</u> fin of Weberling, under such circumstance, would experience a reverse motion, wherein the smaller fin would trail the larger fin.

In either one of the above-described scenarios, the fin assembly of Weberling would meet the limitation "smaller fin trailing the larger fin".

With respect to above described scenario 1, the forwardly disposed edge of larger fin is the leading primary edge, and the forwardly disposed edge of smaller fin is the leading secondary edge. Similarly, the rearwardly disposed edge of larger fin is the trailing primary edge, and the rearwardly disposed edge of smaller fin is the trailing secondary edge.

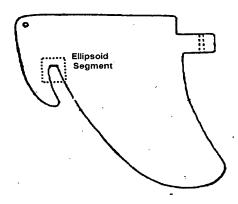
Re claim 5, the base extends longitudinally between the leading primary edge and the trailing secondary edge.

Re claim 6, the trailing primary edge and the leading secondary edge are joined by an intermediate arcuate edge defined by the base.

Application/Control Number: 10/501,582

Art Unit: 3617

Re claim 7, the arcuate edge can be arbitrarily assumed to span a segment that is longer vertically than horizontally, thereby defining an ellipsoid shape. In such case, the arcuate edge would have varying radius.



Re claim 13, the leading primary edge is curved substantially complementarily to the leading secondary edge.

Re claim 16, the fins are made of aluminum, and therefore, are inherently capable of certain degree of deformation if exposed to extreme hydrodynamic forces during use.

Re claim 35, a sectional area of the feathered portion appears to be greater than 0.2X of the combined total sectional area defined by the base, the primary fin and the secondary fin.

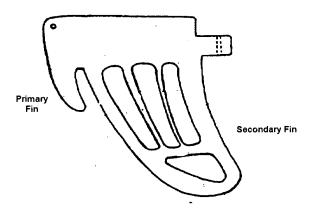
Re claims 36 and 37, the conventionally installed fin assembly on a surfboard, as disclosed by Weberling, would meet all requirement of the claims under conditions described in scenario 2.

Re claims 38-41, the steps recited in the "method of manufacturing" claims are inherent in the construction of the fin. The newly added "method of use" limitation "such that in use the smaller fin trails the larger fin" is not a manufacturing step, and therefore has not been accorded any patentable weight. However, even if such limitation were to be given weight, the condition described in scenario 2 above would satisfy such limitation.

Application/Control Number: 10/501,582

Art Unit: 3617

<u>Alternatively</u>, regarding claims 17-30 and 32-34, the smaller fin is considered to be the primary fin and the larger fin is considered to be the secondary fin. The secondary (larger) fin extends rearwardly from a rear of the base.



Re claim 22, if the fin is tilted 90 degrees clockwise, the secondary fin would be disposed under the leading and trailing edges of the primary fin.

Re claim 24, the trailing edge (of the primary fin) is feathered – or curved – in an area intermediate the secondary fin and the leading edge (of the primary fin).

Re claim 26, see explanation provided for claim 7 above.

Response to Arguments

3. Applicant's arguments filed 2/13/2006 have been fully considered but they are not persuasive.

Application/Control Number: 10/501,582 Page 6

Art Unit: 3617

102(b) rejection of claims 1-30 and 32-46 based on AU 9170912 A (Weberling)

(i) <u>Arguments</u>: Regarding claims 1, 12, 14, 35, 38 and 42, applicant has argued that Weberling does not show "the smaller fin trailing the larger fin", as required by the newly amended claims.

<u>Response</u>: As described in the rejection in ¶2 above, consider a scenario 1 in which the fin assembly of Weberling is be reversibly mounted on a surfboard or any other flotation device. In such case, the smaller fin would trail the larger fin.

Under scenario 2, alternatively, if a board device is subjected to propulsion in a rearward direction, the <u>conventionally installed</u> fin of Weberling would also undergo a similar reverse motion, wherein the smaller fin would trail the larger fin.

In either one of the above-described scenarios, the fin assembly of Weberling would meet the limitation "smaller fin trailing the larger fin".

(ii) <u>Arguments</u>: Regarding claims 38-41, applicant has further argued that

Weberling does not disclose "<u>in use</u> the smaller fin trails the larger fin", as
required by the newly amended claim 38.

<u>Response</u>: Claims 38 is directed to a method of manufacturing. Because the newly added "method of use" limitation is not a manufacturing step, it has not been accorded any patentable weight.

(iii) <u>Arguments</u>: Regarding claims 17-30 and 32-34, applicant has argued that Weberling does not disclose the secondary fin extending <u>rearwardly</u> from a rear of the base.

Art Unit: 3617

Response: When the smaller fin is considered to be the primary fin and the larger fin is considered to be the secondary fin, the secondary (larger) fin extends rearwardly from a rear of the base.

*** Note: See the rejection in ¶2 above for a detailed description. All arguments regarding dependent claims have been individually addressed in the above rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 -- 5:30 pm.

Application/Control Number: 10/501,582 Page 8

Art Unit: 3617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajay Vasudeva Examiner Art Unit 3617

PATENT EXAMINER